



COUNTY OF SAN DIEGO

**Great Government Through the General Management System – Quality, Timeliness, Value**  
DEPARTMENT OF HUMAN RESOURCES

CLASS SPECIFICATION

CLASSIFIED

SUPERVISING IT ENGINEER

Class No. 002427

■ CLASSIFICATION PURPOSE

Under direction, to supervise assigned Information Technology (IT) personnel responsible for operations, applications, security procedures, and projects; to monitor, recommend and implement IT software and hardware for multi-level information technology systems utilized by a designated County department; and to perform related work as required.

■ DISTINGUISHING CHARACTERISTICS

Supervising IT Engineers are supervisors who report to unclassified or executive managers. Incumbents are responsible for directing, coordinating, and reviewing the work of IT professional and technical employees assigned to an Information Technology section. Positions in this classification are found only in departments directed by elected officials or the Department of Child Support Services. This class differs from the next lower level, Senior IT Engineer, in that the latter is generally responsible for serving as a project leader or a first-line supervisor over a team of IT staff or is responsible for highly complex IT projects involving the design, development, analysis, implementation, and maintenance of software and hardware for multi-level departmental systems.

■ FUNCTIONS

**The examples of functions listed in the class specification are representative but not necessarily exhaustive or descriptive of any one position in the class. Management is not precluded from assigning other related functions not listed herein if such duties are a logical assignment for the position.**

Essential Functions:

1. Develops and implements goals, strategies, objectives, and work plans for an assigned IT section consisting of IT professional and technical staff; monitors the work of staff to determine if goals and strategies are accomplished.
2. Manages the work of staff by planning, directing, coordinating, scheduling, monitoring, and evaluating assignments.
3. Meets with professional IT staff to discuss the status of on-going IT projects and identify, address, and resolve technical problems.
4. Prepares performance evaluations, conducts meetings with employees pertaining to performance evaluations, and conducts counseling and disciplinary meetings when necessary.
5. Establishes and maintains plans and budgets for IT projects and ensures that staff adheres to schedules, policy, procedures, and guidelines.
6. Reviews and recommends IT policy and procedures pertaining to the assigned department; may revise or develop new policy and procedures; and facilitates strategic and operational planning with IT or division managers.
7. Formulates and implements business process re-engineering (BPR) efforts to improve the business processes of an assigned department.
8. Prepares technical writings and manuals for division managers within a department; makes presentations to managers and employees pertaining to topics found in technical writings and manuals.
9. Develops policy, procedural, and technical manuals pertaining to software or systems usage, applications, security, and operations, which includes, but is not limited to, telecommunications, wide area networks (WAN), local area networks (LAN), desktops, data centers, end-user support, security, applications, image processing, database management, and web-site security/management.
10. Uses a variety of software packages and computer languages to develop management information and operational system reports.
11. Evaluates new developments in computer systems or LAN software applications to determine the feasibility of upgrading existing systems, and makes recommendations to management.

12. Reviews contract proposals for software and hardware services for accuracy and conformance to departmental standards.
13. Provides input and advice to managers pertaining to department IT budgets, with particular responsibility for assigned functions.
14. Meets with customers and representatives of hardware and software vendors to coordinate the installation of new systems, upgrade existing systems, or discuss other IT projects for the assigned department.
15. Conducts cost-benefit studies and analyses to determine the need of procuring computer software and equipment.
16. Performs feasibility studies to determine software and hardware requirements.
17. Represents the department or the County at seminars, trade shows, user group meetings, and other IT-related events.
18. Administers and maintains designated Enterprise Resource Planning (ERP) functions such as creating projects, updating and monitoring project expenditures, initiating and authorizing fund transfers, tracking labor time and costs, and preparing management reports.
19. Coordinates planned outages, upgrades, and testing processes with affected customers and ensures that applications are available and maintained in accordance with departmental procedures and defined standards.
20. Analyzes the causes of unplanned application outages and communicates findings and timelines to managers and affected customers.
21. Provides responsive, high quality service to County employees, management, and representatives of outside agencies by providing accurate, complete and up-to-date information, in a courteous, efficient, and timely manner.

#### ■ KNOWLEDGE, SKILLS, AND ABILITIES

##### Knowledge of:

- Principles, practices, and methods used to supervise, train, monitor, review, and evaluate the work performed by professional, technical, support, and/or other personnel assigned to an IT section.
- Computer hardware and software capabilities including LAN's, WAN's, telecommunications, desktops, data centers, IT security, and IT applications.
- Standard system development methodologies and Computer Assisted Software Engineering (CASE) tools.
- Information Technology industry trends and standards.
- Modern methods and state-of-the-art technology related to Information Technology systems.
- Principles and theory of contract administration, fiscal management, and accounting as applied to reviewing and approving procurement and contract documents, conducting cost-benefit analysis, and preparing budget estimates.
- Purchasing and contracting concepts and feasibility study requirements.
- Principles or techniques involved in computer structured programming.
- Cost factors for both manual and automated systems.
- Principles, methods, and techniques used to analyze and design software and hardware systems.
- Concepts, methods, and techniques of project management pertaining to information technology.
- Concepts, methods, and techniques of data file management and capabilities of databases and database products.
- Concepts, methods, techniques, and capabilities of platform connectivity products.
- Concepts, methods, techniques, and capabilities of electronic digitizing, imaging, scanning, electronic capturing, and indexing products.
- State and federal laws, regulations, and county administrative guidelines and policies applicable to Information Technology activities within the County.
- Strategic initiatives, organizational structure and general functions, activities, and operations of the assigned County department.
- General and project-oriented accounting procedures and concepts pertaining to the assigned department.
- Telephone, office, and online etiquette.
- County customer service objectives and strategies

##### Skills and Abilities to:

- Plan, organize, and direct information systems activities for large, multi-level platform systems, which are used by assigned departments.
- Supervise, train, monitor, and evaluate the work of professional, technical, and support IT staff.
- Provide effective leadership over an IT team responsible for performing highly complex software or system development projects.
- Prepare performance evaluations that are fair, factual, and unbiased.
- Develop and implement IT policies and procedures, guidelines and training programs including policy pertaining to information systems security and assessment processes.

- Design system configurations that are cost effective and meet the needs of the users.
- Understand the overall IT needs of the assigned department, assess the criticality of IT tasks, and examine and implement reasonable and logical alternatives.
- Organize and prioritize assignments in an effective manner to meet established deadlines.
- Prepare management and technical reports and present findings and recommendations to executive and unclassified managers.
- Communicate effectively verbally in a clear, concise, and understandable manner when speaking to individuals and groups and when making presentations.
- Communicate effectively in writing when preparing reports, correspondence, presentation materials, and documents; prepare documents so that they are written clearly, concisely, and accurately in order to describe application, hardware, and system configuration interfaces.
- Establish effective cooperative and collaborative working relationships with management, employees, employee representatives, and officials or representatives of outside agencies or vendors representing diverse cultures and backgrounds.
- Treat County employees and representatives of outside agencies with courtesy and respect.
- Assess the customer's immediate needs and ensure customer's receipt of needed services through personal service or referral.
- Exercise appropriate judgment in answering questions and releasing information; analyze and project consequences of decisions and/or recommendations.

#### ■ EDUCATION/EXPERIENCE

Education, training, and/or experience that demonstrate possession of the knowledge, skills and abilities listed above. An example of qualifying education/experience is a bachelor's degree from an accredited college or university in computer science, information systems, or related field; AND, three (3) years of lead worker or project leader experience-. Previous experience must have included the responsibility and accountability for developing, monitoring, and reviewing information systems, or applications, or projects which included a variety of networks, data centers, image processing, and web-site management systems.

#### Notes:

- Additional years of directly related verifiable experience may be substituted for the required education on a year-for-year basis.
- Experience limited to selling, using, or operating a microcomputer or word processor is not considered qualifying.
- Possession of professional certifications from the categories listed below may be substituted for the education requirement up to a maximum of 2 years. One certification from the categories below may substitute 1 year of the education requirement. Two certifications from 2 separate categories below may substitute for 2 years of the education requirement.

Category 1: Microsoft Certifications:

MCSE (current OS), MCSA, MCAD, MCSD, MCPD, MCDBA, or MCAP

Category 2: Cisco Certifications:

Cisco Professional or Expert level such as CCNP, CCIE, CCDP, CCSP, or CCIP

Category 3 Oracle Certifications:

Oracle OCP, OCA, or OCM

#### ■ ESSENTIAL PHYSICAL CHARACTERISTICS

**The physical characteristics described here are representative of those that must be met by an employee to successfully perform the essential functions of the classification. Reasonable accommodation may be made to enable an individual with qualified disabilities to perform the essential functions of a job, on a case-by-case basis.**

Frequent: sitting, standing, walking, bending, squatting, crawling, and repetitive use of hands to operate computers, printers, copiers, and telephones, twisting and bending of neck and waist, pushing and pulling carts, reaching above and below the shoulder level. Occasional: lifting and carrying computer equipment weighing up to 50 pounds for a distance of 3 to 5 feet.

#### ■ SPECIAL NOTES, LICENSES, OR REQUIREMENTS

##### License

A valid California class C driver's license, which must be maintained throughout employment in this class, is required at time of appointment, or the ability to arrange necessary and timely transportation for travel. Employees in this class may be required to use their own vehicle.

##### Working Conditions

The primary work place is indoors in an office environment. Work involves constant exposure to computer screens and equipment.

Work may involve exposure to sharp edges or tools and electrical currents. Work involves frequent travel to locations within and outside of the county. Incumbents may be required to work during irregular work hours such as evenings, weekends, and holidays while serving on an on-call basis.

#### Background Investigation

- Sheriff/District Attorney/Child Support Services: Must have a reputation for honesty and trustworthiness. Felony convictions will be disqualifying. Misdemeanor convictions may be disqualifying depending on type, number, severity, and recency. Prior to appointment, candidates will be subject to a thorough background investigation which may include a psychological, polygraph or other examination or test.
- Assessor/Recorder/County Clerk: Must have a reputation for honesty and trustworthiness. Misdemeanor and/or felony convictions may be disqualifying depending on number, severity, and recency. Applicants will be subject to a background check.

#### Probationary Period

Incumbents appointed to permanent positions in this class shall serve a probationary period of 12 months (Civil Service Rule 4.2.5).

**Revised: December 5, 2002**  
**Reviewed: Spring 2003**  
**Revised: June 14, 2004**  
**Revised: August 11, 2006**